

# SEQUENCE LISTING

<110> Rosanne M. Crooke  
Mark J. Graham  
Kristina M. Lemonidis

<120> ANTISENSE MODULATION OF ACYL COA CHOLESTEROL ACYLTRANSFERASE-2  
EXPRESSION

<130> ISPH-0588

<160> 65

<210> 1  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 1  
tccgtcatcg ctcctcaggg 20

<210> 2  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 2  
atgcattctg cccccaagga 20

<210> 3  
<211> 1569  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> (1)...(1569)

<400> 3  
atg gag cca ggc ggg gcc cgt ctg cgt ctg cag agg aca gaa ggg ctg 48  
Met Glu Pro Gly Gly Ala Arg Leu Arg Leu Gln Arg Thr Glu Gly Leu  
1 5 10 15

gga ggg gag cgg gag cgc caa ccc tgt gga gat gga aac act gag acg 96  
Gly Gly Glu Arg Glu Arg Gln Pro Cys Gly Asp Gly Asn Thr Glu Thr  
20 25 30

cac aga gcc ccg gac ttg gta caa tgg acc cga cac atg gag gct gtg 144  
His Arg Ala Pro Asp Leu Val Gln Trp Thr Arg His Met Glu Ala Val

35					40					45						
aag	gca	caa	ttg	ctg	gag	caa	gcg	cag	gga	caa	ctg	agg	gag	ctg	ctg	192
Lys	Ala	Gln	Leu	Leu	Glu	Gln	Ala	Gln	Gly	Gln	Leu	Arg	Glu	Leu	Leu	
50			55			60										
gat	cgg	gcc	atg	cgg	gag	gct	ata	caa	tcc	tac	cca	tca	caa	gac	aaa	240
Asp	Arg	Ala	Met	Arg	Glu	Ala	Ile	Gln	Ser	Tyr	Pro	Ser	Gln	Asp	Lys	
65			70			75			80							
cct	ctg	ccc	cca	cct	ccc	cca	ggg	tcc	ttg	agc	agg	acc	cag	gag	cca	288
Pro	Leu	Pro	Pro	Pro	Pro	Pro	Gly	Ser	Leu	Ser	Arg	Thr	Gln	Glu	Pro	
85			90			95										
tcc	ctg	ggg	aaa	cag	aaa	gtt	ttc	atc	atc	cgc	aag	tcc	ctg	ctt	gat	336
Ser	Leu	Gly	Lys	Gln	Lys	Val	Phe	Ile	Ile	Arg	Lys	Ser	Leu	Leu	Asp	
100			105			110										
gag	ctg	atg	gag	gtg	cag	cat	ttc	cgc	acc	atc	tac	cac	atg	ttc	atc	384
Glu	Leu	Met	Glu	Val	Gln	His	Phe	Arg	Thr	Ile	Tyr	His	Met	Phe	Ile	
115			120			125										
gct	ggc	ctg	tgt	gtc	ttc	atc	atc	agc	acc	ctg	gcc	atc	gac	ttc	att	432
Ala	Gly	Leu	Cys	Val	Phe	Ile	Ile	Ser	Thr	Leu	Ala	Ile	Asp	Phe	Ile	
130			135			140										
gat	gag	ggc	agg	ctg	ctg	ctg	gag	ttt	gac	cta	ctg	atc	ttc	agc	ttc	480
Asp	Glu	Gly	Arg	Leu	Leu	Leu	Glu	Phe	Asp	Leu	Leu	Ile	Phe	Ser	Phe	
145			150			155						160				
gga	cag	ctg	cca	ttg	gcg	ctg	gtg	acc	tgg	gtg	ccc	atg	ttt	ctg	tcc	528
Gly	Gln	Leu	Pro	Leu	Ala	Leu	Val	Thr	Trp	Val	Pro	Met	Phe	Leu	Ser	
165			170			175										
acc	ctg	ttg	gcg	ccg	tac	cag	gcc	cta	cgg	ctg	tgg	gcc	agg	ggc	acc	576
Thr	Leu	Leu	Ala	Pro	Tyr	Gln	Ala	Leu	Arg	Leu	Trp	Ala	Arg	Gly	Thr	
180			185			190										
tgg	acg	cag	gcg	acg	ggc	ctg	ggc	tgt	gcg	ctt	tta	gcc	gcc	cac	gcc	624
Trp	Thr	Gln	Ala	Thr	Gly	Leu	Gly	Cys	Ala	Leu	Leu	Ala	Ala	His	Ala	
195			200			205										
gtg	gtg	ctc	tgc	gcg	ctg	ccg	gtc	cac	gtg	gcc	gtg	gag	cat	cag	ctc	672
Val	Val	Leu	Cys	Ala	Leu	Pro	Val	His	Val	Ala	Val	Glu	His	Gln	Leu	
210			215			220										
ccg	ccg	gcc	tcc	cgt	tgt	gtc	ctg	gtc	ttc	gag	cag	gtt	agg	ttc	ctg	720
Pro	Pro	Ala	Ser	Arg	Cys	Val	Leu	Val	Phe	Glu	Gln	Val	Arg	Phe	Leu	
225			230			235						240				
atg	aaa	agc	tac	tcc	ttc	ctg	aga	gag	gct	gtg	cct	ggg	atc	ctt	cgt	768
Met	Lys	Ser	Tyr	Ser	Phe	Leu	Arg	Glu	Ala	Val	Pro	Gly	Ile	Leu	Arg	
245			250			255										
gcc	aga	cga	ggg	gag	ggg	atc	cag	gcc	ccc	agt	ttc	tcc	agc	tac	ctc	816
Ala	Arg	Arg	Gly	Glu	Gly	Ile	Gln	Ala	Pro	Ser	Phe	Ser	Ser	Tyr	Leu	
260			265			270										

tac ttc ctc ttc tgc cca aca ctc atc tac agg gag act tac cct agg	864
Tyr Phe Leu Phe Cys Pro Thr Leu Ile Tyr Arg Glu Thr Tyr Pro Arg	
275 280 285	
acg ccc tat gtc agg tgg aat tat gtg gcc aag aac ttt gcc cag gcc	912
Thr Pro Tyr Val Arg Trp Asn Tyr Val Ala Lys Asn Phe Ala Gln Ala	
290 295 300	
ctg gga tgt gtg ctc tat gcc tgc ttc atc ctg ggc cgc ctc tgt gtt	960
Leu Gly Cys Val Leu Tyr Ala Cys Phe Ile Leu Gly Arg Leu Cys Val	
305 310 315 320	
cct gtc ttt gcc aac atg agc cga gag ccc ttc agc acc cgt gcc ctg	1008
Pro Val Phe Ala Asn Met Ser Arg Glu Pro Phe Ser Thr Arg Ala Leu	
325 330 335	
gtg ctc tct atc ctg cat gcc acg ttg cca ggc atc ttc atg ctg ctg	1056
Val Leu Ser Ile Leu His Ala Thr Leu Pro Gly Ile Phe Met Leu Leu	
340 345 350	
ctc atc ttc ttt gcc ttc ctc cat tgc tgg ctc aac gcc ttt gcc gag	1104
Leu Ile Phe Phe Ala Phe Leu His Cys Trp Leu Asn Ala Phe Ala Glu	
355 360 365	
atg cta cga ttt gga gac agg atg ttc tac cgg gac tgg tgg aac tca	1152
Met Leu Arg Phe Gly Asp Arg Met Phe Tyr Arg Asp Trp Trp Asn Ser	
370 375 380	
acg tcc ttc tcc aac tac tac cgc act tgg aac gtg gtg gtc cat gac	1200
Thr Ser Phe Ser Asn Tyr Tyr Arg Thr Trp Asn Val Val Val His Asp	
385 390 395 400	
tgg ctg tac agc tac gtg tat cag gat ggg ctg cgg ctc ctt ggt gcc	1248
Trp Leu Tyr Ser Tyr Val Tyr Gln Asp Gly Leu Arg Leu Leu Gly Ala	
405 410 415	
cgg gcc cga ggg gta gcc atg ctg ggt gtg ttc ctg gtc tcc gca gtg	1296
Arg Ala Arg Gly Val Ala Met Leu Gly Val Phe Leu Val Ser Ala Val	
420 425 430	
gcc cat gag tat atc ttc tgc ttc gtc ctg ggg ttc ttc tat ccc gtc	1344
Ala His Glu Tyr Ile Phe Cys Phe Val Leu Gly Phe Phe Tyr Pro Val	
435 440 445	
atg ctg ata ctc ttc ctt gtc att gga gga atg ttg aac ttc atg atg	1392
Met Leu Ile Leu Phe Leu Val Ile Gly Gly Met Leu Asn Phe Met Met	
450 455 460	
cat gac cag cgc acc ggc ccg gca tgg aac gtg ctg atg tgg acc atg	1440
His Asp Gln Arg Thr Gly Pro Ala Trp Asn Val Leu Met Trp Thr Met	
465 470 475 480	
ctg ttt cta ggc cag gga atc cag gtc agc ctg tac tgc cag gag tgg	1488
Leu Phe Leu Gly Gln Gly Ile Gln Val Ser Leu Tyr Cys Gln Glu Trp	
485 490 495	

tac gca cgg cgg cac tgc ccc tta ccc cag gca act ttc tgg ggg ctg	1536
Tyr Ala Arg Arg His Cys Pro Leu Pro Gln Ala Thr Phe Trp Gly Leu	
500 505 510	

gtg aca cct cga tct tgg tcc tgc cat acc tag	1569
Val Thr Pro Arg Ser Trp Ser Cys His Thr	
515 520	

<210> 4  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR Primer

<400> 4	
tgggtccatga ctggctgtac a	21

<210> 5  
 <211> 15  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR Primer

<400> 5	
cccggggcacc aagga	15

<210> 6  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR Probe

<400> 6	
ctacgtgtat caggatgggc tgcgg	25

<210> 7  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR Primer

<400> 7	
gaaggtgaag gtcggagtc	19

<210> 8  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

Sequence 2300

[illegible]

```
<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> PCR Probe

<400> 9
caagcttccc gttctcagcc
20
```

```
<210> 10
<211> 1607
<212> DNA
<213> Mus musculus
```

```
<220>  
<221> CDS  
<222> (30) ... (1607)
```

<400> 10																	
ctgtgtgctg	tccgctctac	actggcacc	atg	cag	cca	aag	gtg	ccc	cag	ctt							53
			Met	Gln	Pro	Lys	Val	Pro	Gln	Leu							
			1						5								
cgg	agg	aga	gaa	ggg	ctg	gga	gag	gag	cag	gag	aag	gga	gcc	cgt	gga	101	
Arg	Arg	Arg	Glu	Gly	Leu	Gly	Glu	Glu	Gln	Glu	Lys	Gly	Ala	Arg	Gly		
10			15			20											
gga	gaa	ggg	aac	gca	agg	aca	cac	gga	acc	cca	gac	ttg	gtg	caa	tgg	149	
Gly	Glu	Gly	Asn	Ala	Arg	Thr	His	Gly	Thr	Pro	Asp	Leu	Val	Gln	Trp		
25			30			35								40			
act	cga	cat	atg	gag	gct	gtg	aag	acn	cag	ttt	ctg	gag	caa	gca	cag	197	
Thr	Arg	His	Met	Glu	Ala	Val	Lys	Thr	Gln	Phe	Leu	Glu	Gln	Ala	Gln		
			45			50								55			
aga	gag	ttg	gca	gag	ctg	ttg	gat	cgg	gcc	cta	tgg	gag	gct	atg	caa	245	
Arg	Glu	Leu	Ala	Glu	Leu	Leu	Asp	Arg	Ala	Leu	Trp	Glu	Ala	Met	Gln		
			60			65								70			
gct	tac	ccc	aaa	caa	gac	aga	cct	ctt	ccc	tcc	gct	gcc	cca	gat	tct	293	
Ala	Tyr	Pro	Lys	Gln	Asp	Arg	Pro	Leu	Pro	Ser	Ala	Ala	Pro	Asp	Ser		
75			80			85											
aca	agc	aag	acc	ccg	gag	tta	cgc	cct	gga	aaa	cgg	aaa	gtt	ttc	gtc	341	
Thr	Ser	Lys	Thr	Pro	Glu	Leu	Arg	Pro	Gly	Lys	Arg	Lys	Val	Phe	Val		
90			95			100											
gcc	cgc	aag	tca	ctg	atc	gat	gag	cta	atg	gag	gtg	caa	cat	ttc	cga	389	

Ala	Arg	Lys	Ser	Leu	Ile	Asp	Glu	Leu	Met	Glu	Val	Gln	His	Phe	Arg	
105					110					115					120	
acc	atc	tac	cac	atg	ttc	ata	gcg	ggc	cta	tgg	ttc	ttg	atc	atc	agc	437
Thr	Ile	Tyr	His	Met	Phe	Ile	Ala	Gly	Leu	Trp	Phe	Leu	Ile	Ile	Ser	
				125					130					135		
acc	ctg	gcc	atc	gac	ttc	att	gat	gag	ggc	agg	ttg	atg	ctg	gag	ttt	485
Thr	Leu	Ala	Ile	Asp	Phe	Ile	Asp	Glu	Gly	Arg	Leu	Met	Leu	Glu	Phe	
			140					145					150			
gac	tta	ctc	ctc	ttc	agc	ttc	gga	cag	ctg	ccc	ttg	gcg	ctg	atg	acc	533
Asp	Leu	Leu	Leu	Phe	Ser	Phe	Gly	Gln	Leu	Pro	Leu	Ala	Leu	Met	Thr	
		155					160					165				
tgg	gtt	ccc	atg	ttc	ctg	tat	acg	ctc	cta	gtg	ccc	tac	cag	acc	ctg	581
Trp	Val	Pro	Met	Phe	Leu	Tyr	Thr	Leu	Leu	Val	Pro	Tyr	Gln	Thr	Leu	
	170					175					180					
tgg	ctg	tgg	gcc	agg	ccg	cgc	gct	ggg	ggt	gcc	tgg	atg	ctg	ggg	gcc	629
Trp	Leu	Trp	Ala	Arg	Pro	Arg	Ala	Gly	Gly	Ala	Trp	Met	Leu	Gly	Ala	
185					190					195				200		
agc	ctg	ggc	tgc	gtt	ctg	ctg	gct	gcc	cac	gct	gtg	gtg	ctc	tgc	gtc	677
Ser	Leu	Gly	Cys	Val	Leu	Leu	Ala	Ala	His	Ala	Val	Val	Leu	Cys	Val	
				205					210					215		
ctg	ccg	gtg	cac	gtg	tca	gtg	agg	cat	gag	ctt	ccg	ccc	gcc	tgc	cgc	725
Leu	Pro	Val	His	Val	Ser	Val	Arg	His	Glu	Leu	Pro	Pro	Ala	Ser	Arg	
			220					225					230			
tgc	gtg	ctg	gtc	ttt	gag	cag	gtc	aga	ttg	ctg	atg	aaa	agc	tac	tcc	773
Cys	Val	Leu	Val	Phe	Glu	Gln	Val	Arg	Leu	Leu	Met	Lys	Ser	Tyr	Ser	
		235					240					245				
ttc	ctg	aga	gag	act	gtg	cct	ggg	atc	ttt	tgt	gtc	aga	cga	gga	aag	821
Phe	Leu	Arg	Glu	Thr	Val	Pro	Gly	Ile	Phe	Cys	Val	Arg	Arg	Gly	Lys	
	250					255					260					
ggc	atc	agc	ccc	cca	agt	ttc	tcc	agc	tac	ctc	tac	ttc	ctc	ttc	tgc	869
Gly	Ile	Ser	Pro	Pro	Ser	Phe	Ser	Ser	Tyr	Leu	Tyr	Phe	Leu	Phe	Cys	
265					270					275					280	
cct	aca	ctt	atc	tac	aga	gag	aca	tac	ccc	agg	aca	ccc	agc	atc	agg	917
Pro	Thr	Leu	Ile	Tyr	Arg	Glu	Thr	Tyr	Pro	Arg	Thr	Pro	Ser	Ile	Arg	
				285					290					295		
tgg	aac	tat	gtg	gcc	aag	aac	ttt	gcc	cag	gtc	ctg	ggc	tgt	ttg	ctc	965
Trp	Asn	Tyr	Val	Ala	Lys	Asn	Phe	Ala	Gln	Val	Leu	Gly	Cys	Leu	Leu	
			300					305					310			
tat	gcc	tgc	ttc	atc	ctg	ggc	cgc	ctc	tgt	gtc	cct	gtc	ttt	gcc	aac	1013
Tyr	Ala	Cys	Phe	Ile	Leu	Gly	Arg	Leu	Cys	Val	Pro	Val	Phe	Ala	Asn	
		315					320					325				
atg	agc	cgg	gaa	ccc	ttc	agc	acc	cgg	gct	ctg	ctg	ctc	tcc	atc	ttg	1061
Met	Ser	Arg	Glu	Pro	Phe	Ser	Thr	Arg	Ala	Leu	Leu	Leu	Ser	Ile	Leu	

330	335	340	
cat gcc acg ggg cca ggc atc ttc atg ctg ctc ctc atc ttc ttc gcc			1109
His Ala Thr Gly Pro Gly Ile Phe Met Leu Leu Leu Ile Phe Phe Ala			
345	350	355	360
ttc ctg cac tgc tgg ctc aac gcc ttc gcc gag atg ctg cgg ttt gga			1157
Phe Leu His Cys Trp Leu Asn Ala Phe Ala Glu Met Leu Arg Phe Gly			
	365	370	375
gac agg atg ttc tac cgg gac tgg tgg aac tcg act tcc ttc tcc aac			1205
Asp Arg Met Phe Tyr Arg Asp Trp Trp Asn Ser Thr Ser Phe Ser Asn			
	380	385	390
tac tac cgc acc tgg aac gtc gtg gtc cat gac tgg ctg tac agc tat			1253
Tyr Tyr Arg Thr Trp Asn Val Val Val His Asp Trp Leu Tyr Ser Tyr			
	395	400	405
gtg tat caa gat ggg ctg tgg ctc tta ggc agg cgg gct cgc ggg gtg			1301
Val Tyr Gln Asp Gly Leu Trp Leu Leu Gly Arg Arg Ala Arg Gly Val			
	410	415	420
gcc atg ctg gga gtg ttc ctg gtg tct gcg gtg gtt cat gag tat atc			1349
Ala Met Leu Gly Val Phe Leu Val Ser Ala Val Val His Glu Tyr Ile			
	425	430	435
ttc tgc ttc gtc ctg ggg ttc ttc tac ccg gtc atg ctg atg cta ttc			1397
Phe Cys Phe Val Leu Gly Phe Phe Tyr Pro Val Met Leu Met Leu Phe			
	445	450	455
ctt gtt ttc ggg ggg ctg ctg aat ttc acc atg aac gac agg cac aca			1445
Leu Val Phe Gly Gly Leu Leu Asn Phe Thr Met Asn Asp Arg His Thr			
	460	465	470
ggg cca gcc tgg aac atc ctg atg tgg acc ttt ctc ttc atg ggc cag			1493
Gly Pro Ala Trp Asn Ile Leu Met Trp Thr Phe Leu Phe Met Gly Gln			
	475	480	485
ggc atc cag gtc agc cta tac tgc cag gag tgg tat gct cgt cga cac			1541
Gly Ile Gln Val Ser Leu Tyr Cys Gln Glu Trp Tyr Ala Arg Arg His			
	490	495	500
tgt ccc ctg ccc cag aca aca ttc tgg ggg atg gtg aca ccc caa tct			1589
Cys Pro Leu Pro Gln Thr Thr Phe Trp Gly Met Val Thr Pro Gln Ser			
	505	510	515
tgg tcc tgc cat acc tag			1607
Trp Ser Cys His Thr			
	525		

<210> 11  
 <211> 16  
 <212> DNA  
 <213> Artificial Sequence

<220>

[illegible]

16

<213> Artificial Sequence

<223> PCR Primer

21

<213> Artificial Sequence

<223> PCR Probe

24

<213> Artificial Sequence

<223> PCR Primer

20

<213> Artificial Sequence

<223> PCR Primer

20

<213> Artificial Sequence

<223> PCR Probe



991006 072004  
T00E20 9200150

<400> 16 tgtgcgtctc agtgtttcca	20
<210> 17 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Antisense Oligonucleotide	
<400> 17 gtcgggtcca ttgtaccaag	20
<210> 18 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Antisense Oligonucleotide	
<400> 18 cagttgtccc tgcgcttgct	20
<210> 19 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Antisense Oligonucleotide	
<400> 19 gcccgatcca gcagctccct	20
<210> 20 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Antisense Oligonucleotide	
<400> 20 tttccccagg gatggctcct	20
<210> 21 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Antisense Oligonucleotide	
<400> 21 cagcagcctg ccctcatcaa	20



<211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 27  
 gttcttggcc acataattcc 20  
  
 <210> 28  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 28  
 aacacagagg cggcccagga 20  
  
 <210> 29  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 29  
 cctggcaacg tggcatgcag 20  
  
 <210> 30  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 30  
 gcaaaggcgt tgagccagca 20  
  
 <210> 31  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 31  
 gtcattggacc accacgttcc 20  
  
 <210> 32  
 <211> 20  
 <212> DNA

09910026.073004

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 32

ggagccgcag cccatcctga

20

<210> 33

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 33

ggagaccagg aacacaccca

20

<210> 34

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 34

tccatgccgg gccggtgcgc

20

<210> 35

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 35

gctgacctgg attccctggc

20

<210> 36

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 36

gcaggaccaa gatcgaggtg

20

<210> 37

<211> 20

<212> DNA

<213> Artificial Sequence

09948025 073004  
T00220 3208460

<220>  
<223> Antisense Oligonucleotide

<400> 37  
ggcaaattca acggcacagt 20

<210> 38  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 38  
gggtctcgct cctggaagat 20

<210> 39  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 39  
aaggccgaga atgggaagct tgtcatc 27

<210> 40  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 40  
gtagagcgga cagcacacag 20

<210> 41  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 41  
ttggctgcat ggtgccagtg 20

<210> 42  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 42  
 tccttgcggtt cccttctcct 20  
  
 <210> 43  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 43  
 gcccgatcca acagctctgc 20  
  
 <210> 44  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 44  
 taagcttgca tagcctccca 20  
  
 <210> 45  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 45  
 atcaagaacc ataggcccg 20  
  
 <210> 46  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 46  
 ccagcatcaa cctgccctca 20  
  
 <210> 47  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 47



<210> 53  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 53  
gcatagagca aacagcccag 20

<210> 54  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 54  
ggcggcccag gatgaagcag 20

<210> 55  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 55  
ggttcccggc tcatgttggc 20

<210> 56  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 56  
ccgggtgctg aagggttccc 20

<210> 57  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 57  
agcatgaaga tgcctggccc 20

<210> 58  
<211> 20



<212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 58  
 cgagttccac cagtcccggg 20  
  
 <210> 59  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 59  
 taagagccac agcccatctt 20  
  
 <210> 60  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 60  
 accccgcgag cccgcctgcc 20  
  
 <210> 61  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 61  
 accgggtaga agaaccccag 20  
  
 <210> 62  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Antisense Oligonucleotide  
  
 <400> 62  
 gaaattcagc agccccccga 20  
  
 <210> 63  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 63  
ggatgccctg gcccatgaag 20

<210> 64  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 64  
tgtcaccatc ccccagaatg 20

<210> 65  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Antisense Oligonucleotide

<400> 65  
ctaggtatgg caggaccaag 20

00018026-073004